

CLASSIFICATION CODE: 66 – Lab Equipment & Supplies

SUBJECT: Notice of Intent to Sole Source: Residual Gas Analyzer Heads (4)

SOLICITATION NUMBER: NB620020-17-01732

RESPONSE DATE: 10 days from date of posting

CONTACT POINTS: DeChanta Vaughan, Contract Specialist, 301-975-4686; Joni Laster, Contracting Officer, 301-975-6205

DESCRIPTION:

The National Institute of Standards and Technology (NIST) Acquisition Management Division, on behalf of the Electron Physics Group in the Center for Nanoscale Science and Technology intends to negotiate on a sole source basis with Extorr, Inc. located in New Kensington, Pennsylvania under the authority of FAR Subpart 13.106-1 (b), Soliciting from a Single Source.

The CNST Nanofab has a need for four replacement Residual Gas Analyzer (RGA) heads for the purpose of monitoring vacuum chamber condition and maintaining process control parameters on four existing high vacuum deposition systems. These deposition systems have the Extorr XT100M integrated to monitor vacuum quality. Residual gas analyzers are a small mass spectrometer designed for process control and contamination monitoring in vacuum systems. RGAs are used to monitor the quality of the vacuum and easily detect minute traces of impurities in the low-pressure gas environment. These RGAs are also used as sensitive in-situ leak detectors using helium to check the integrity of the vacuum seals and the quality of the vacuum system i.e. air leaks, virtual leaks and other contaminants at low levels that may be detected before a process is initiated thereby saving process time and in some cases considerable cost to the process engineer. The ability to monitor the gas background of a vacuum chamber is essential to devices made at the nanoscale level.

In order to function properly, the vacuum systems must have fully functioning RGAs with high life expectancy and the associated software in order for the internal detecting mechanism to operate successfully. Without these critical pieces of the vacuum system there is no way of detecting early vacuum chamber degradation or failure which can lead to vacuum component failure and loss of tool use for large amounts of time which is cost prohibitive. The RGA is critical to device processing which can save engineers, technicians and tool users valuable time setting up and qualifying processes.

The proprietary nature of these particular units are that they're small, compact and the software is fully integrated into the existing deposition tools. There are not any other parts that are acceptable for repair that would be compatible with the existing vacuum systems

As a result, the only responsible source for Extorr XT100M Residual Gas Analyzers and associated software is Extorr, Inc. This equipment is proprietary to Extorr, Inc. as they are

the only source to procure the equipment from as they have no authorized distributors or resellers of this equipment.

The NAICS Code is 334516 with a size standard of 1000 employees. NIST anticipates negotiating and awarding a sole source order for this requirement.

No solicitation package will be issued. This notice of intent is not a request for competitive quotations; however, the Government will consider responses received by the established date and time.

A determination by the Government not to compete the proposed acquisition based upon responses to this notice is solely within the discretion of the Government. Information received will normally be considered solely for the purpose of determining whether to conduct a competitive procurement.